

*Please replace claim 1 with the following:*

10 1 A magnetic thin film comprising:  
an iron nitride thin film having a nitrogen martensite  $\alpha'$   
phase with  $\alpha$  (002) surface formed on a substrate using an  
opposed-target DC sputtering method by means of reactive  
sputtering with  $N_2$  gas wherein said iron nitride thin film  
15 produced using an  $N_2$  gas flow rate ratio of 25% permitting  
diffraction rays from a  $\gamma'$  phase to be observed, said  $\alpha'$  phase  
having diffraction rays observed from only said  $\alpha$  (002) surface.

*Please replace claim 2 with the following:*

2. A magnetic thin film comprising:

iron ( $\alpha$  - Fe) thin films and iron nitride thin films  
alternately deposited on a substrate by means of an opposed-  
target DC sputtering method, said iron nitride thin films having  
5 a nitrogen martensite  $\alpha$  phase with  $\alpha$  (002) surface, said  $\alpha'$   
phase having diffraction rays observed only from said  $\alpha$  (002)  
surface wherein a coercive force of said iron nitride thin films  
is substantially 1.0 Gauss.

RECEIVED  
JUN 12 2002  
TC 1700